AMENDMENTS TO THE CLAIMS

The following listing of the claims is provided in accordance with 37 C.F.R. 1.121:

1. (currently amended) A fuel cell stack ~~assembly~~ comprising:

at least one fuel cell assembly comprising an anode layer, a cathode layer and an electrolyte layer interposed therebetween; wherein at least one of said layers comprises a brittle layer having a higher fracture strength in compression than in tension; ~~and~~

at least one interconnect; and

a stress inducer for inducing a planar compressive stress to at least one of said brittle layers.

2. (currently amended) The fuel cell stack ~~assembly~~ in accordance with claim 1, wherein said compressive stress comprises a uniaxial compressive stress induced across at least one local plane of said brittle layer.

3. (currently amended) The fuel cell stack ~~assembly~~ in accordance with claim 1, wherein said compressive stress comprises a biaxial compressive stress induced within the plane of said brittle layer.

4. (currently amended) The fuel cell stack ~~assembly~~ in accordance with claim 1, wherein said stress inducer for inducing said compressive stress comprises a prestressed reinforcement structure applied to said brittle layer.

5. (currently amended) The fuel cell stack ~~assembly~~ in accordance with claim 4, wherein said prestressed reinforcement structure is embedded within said brittle layer.

6. (currently amended) The fuel cell stack ~~assembly~~ in accordance with claim 4, wherein said prestressed reinforcement structure is applied to a second layer other than said brittle layer.

7. (currently amended) The fuel cell stack ~~assembly~~ in accordance with claim 6, wherein said prestressed reinforcement structure comprises at least one of a wire-structure or a fiber structure, or a wire-mesh structure, or a perforated sheet structure.

8. (currently amended) The fuel cell stack ~~assembly~~ in accordance with claim 1, wherein said stress inducer for inducing said compressive stress comprises a reinforcement structure applied to said brittle layer wherein said reinforcement structure has a first pre-determined coefficient of thermal expansion different from a pre-determined coefficient of thermal expansion of said brittle layer.

9. (currently amended) The fuel cell stack ~~assembly~~ in accordance with claim 8, wherein said first pre-determined coefficient of thermal expansion of said reinforcement structure is greater than said pre-determined coefficient of thermal expansion of said brittle layer; the reinforcement structure being adapted

to said brittle layer at a temperature greater than an operational temperature of said brittle layer.

10. (cancelled)

11. (currently amended) The fuel cell stack ~~assembly~~ in accordance with claim [[10]] 8, wherein said reinforcement structure is connected to said brittle layer in a substantially stress-free state.

12. (currently amended) The fuel cell stack ~~assembly~~ in accordance with claim 11, wherein said reinforcement structure further comprises at least one of a wire-structure, or a fiber structure or a wire mesh structure or a perforated sheet structure.

13. (currently amended) The fuel cell stack ~~assembly~~ in accordance with claim 12, wherein said reinforcement structure is applied to said brittle layer.

14. (currently amended) The fuel cell stack ~~assembly~~ in accordance with claim 1, wherein said brittle layer comprises a pre-determined thickness and an unsupported width and the ratio of said pre-determined thickness and said unsupported width of said brittle layer is in the range from about 0.01 to about 1.

15. (cancelled)

16. (cancelled)

17. (original) A method for inducing a planar compressive stress to at least one of a brittle layer of a fuel cell assembly comprising the steps of:

providing a reinforcement structure having a first pre-determined coefficient of thermal expansion to support at least one of an anode layer, a cathode layer and an electrolyte layer interposed therebetween;

wherein at least one of said layers comprises a brittle layer having a higher fracture strength in compression than in tension; and

depositing said brittle layer over said reinforcement structure at a pre-determined deposition temperature wherein the brittle layer comprises a material having a coefficient of thermal expansion different from said first pre-determined coefficient of thermal expansion of said reinforcement structure.

18. (original) The method in accordance with claim 17, wherein said first pre-determined coefficient of thermal expansion of said reinforcement structure is greater than said coefficient of thermal expansion of said brittle layer; the reinforcement structure being connected to said brittle layer at a temperature greater than an operational temperature of said brittle layer.

19. (original) The method in accordance with claim 17, wherein said reinforcement structure is connected to said brittle layer in a substantially stress-free state.

20. (original) The method in accordance with claim 17, wherein said reinforcement structure comprises an interconnect configured to maintain intimate contact with at least one of said brittle layers.

21. (currently amended) A fuel cell stack ~~assembly~~ comprising:

at least one fuel cell assembly comprising an anode layer, a cathode layer and an electrolyte layer interposed therebetween; wherein at least one of said layers comprises a brittle layer having a higher fracture strength in compression than in tension; ~~and~~

at least one interconnect; and

at least one stress inducer for inducing a planar compressive stress to at least one of said brittle layers.